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EXAMINER	
MAI, KEVIN S	
ART UNIT	PAPER NUMBER
2456	

NOTIFICATION DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/544,277	TWISS, ADAM	
	Examiner	Art Unit	
	KEVIN S. MAI	2456	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 February 2010*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *75-89,92-105,108,110-115,117-123 and 126* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *75-89,92-105,108,110-115,117-123 and 126* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This Office Action has been issued in response to Applicant's Amendment filed February 16, 2010.

2. Claims 90, 91, 106, 107, 109, 116, 124, 125 and 127 have been canceled. Claims 75-89, 92-105, 108, 110-115, 117-123 and 126 have been amended. Claims 75-89, 92-105, 108, 110-115, 117-123 and 126 are pending in the application.

Response to Arguments

3. Applicant's arguments filed February 16, 2010 have been considered but are moot in view of the new ground(s) of rejection.

Claim Objections

4. In view of the amendments made the pending claim objections have been withdrawn.

Claim Rejections - 35 USC § 101

5. In view of the cancellations made the pending claim rejections under 35 USC § 101 have been withdrawn.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. Claims 75-80, 87, 92-97, 108, 110-113, 123 and 126 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Pub. No. 2003/0208621 to Bowman (hereinafter "Bowman").

9. **As to Claim 75,** Bowman discloses **a method of reducing traffic in a decentralized peer-to-peer network, said peer-to-peer network operating over an underlying network comprising first and second network portions, the method comprising: identifying, with an Internet Service Provider (ISP) router, whether messages in the first network portion are peer-to-peer messages or other messages** (Paragraph [0053] of Bowman discloses ensuring that a router, such as distribution router 24 of fig. 3 sends only P2P communications to one or more PPO's 10. As one skilled in the art can appreciate, a number of methods may be used to direct P2P traffic to a PPO 10. As such it is seen that the distribution router is able to identify P2P traffic. Paragraph [0035] explains that network 12a is a network maintained by an ISP and that distribution router 24 is a router of network 12a. Accordingly the router is an ISP router);

routing all peer-to-peer messages in the first network portion with an intended destination in the second network portion outside of a network of an Internet Service Provider (ISP) to a gateway between peer-to-peer nodes residing on said first and second network portions (Paragraph [0053] of Bowman discloses ensuring that a router, such as distribution router 24 of fig. 3 sends only P2P communications to one or more PPO's 10. Paragraph [0048] discloses when P2P communication is sent between networks 12a and 12b PPO 10 examines it. Figure 7)**; and**

controlling transport of said peer-to-peer messages at said gateway to limit propagation of said peer-to-peer messages into said second network portion, [without limiting propagation of the other messages into the second network portion] (Paragraphs [0036]-[0041] of Bowman disclose PPO 10 serves to provide three main functions. One function is to reduce network traffic by not broadcasting messages but instead sending them where they need to go, or dropping them if there is no need to send them on. Another is to redirect traffic to a cost efficient path. These are both seen to be methods to control transport of P2P messages)**.** Bowman does not explicitly disclose **without limiting propagation of the other messages into the second network portion**

However, such a feature would have been obvious in view of Bowman. Paragraph [0053] discloses ensuring that a router, such as distribution router 24 of fig. 3 sends only P2P communications to one or more PPO's 10. Thus since only P2P messages are sent to the PPO it is seen that the other traffic is not hindered by the system. Thus although it is not explicitly states that other messages are not limited, since the PPO only acts upon P2P communications it would be obvious that the other messages would not be limited.

10. **As to Claim 76,** Bowman discloses **the method of claim 75, wherein said first network portion comprises a portion of said underlying network managed by the ISP and said second network portion comprises a portion of said underlying network not managed by the ISP that is connected to said first network portion across a boundary** (Paragraph [0035] of Bowman discloses that network 12a is the network maintained by an ISP and network 12a is connected to a plurality of networks 12b to 12n via links 30b to 30n. Typically networks 12b to 12n would be accessible via the internet. Accordingly 12a is a portion managed by the ISP and 12b to 12n are portions that are not).

11. **As to Claim 77,** Bowman discloses **the method of claim 76, further comprising: limiting a number of peer-to-peer connections across said boundary to a permitted maximum** (Paragraph [0078] of Bowman discloses that the system would maintain connections based upon the mount of data, cost class, and the total number of connections that may be maintained. Paragraph [0039] discloses the PPO attempting to connect nodes to other nodes such that connections are not random between nodes).

12. **As to Claim 78,** Bowman discloses **the method of claim 75, wherein said transport controlling further comprises:**
blocking said peer-to-peer messages at said gateway (Paragraph [0040] of Bowman discloses dropping messages if there is no need to send them on).

13. **As to Claim 79,** Bowman discloses **the method of claim 75, wherein said transport controlling further comprises:**

redirecting said peer-to-peer messages to a peer-to-peer node within said first network portion (Paragraph [0041] of Bowman discloses the PPO redirecting traffic to a cost efficient path. Paragraph [0033] explains that typically the most cost efficient paths for P2P transfer in network 12a will be within network 12a. As such the system is seen to redirect messages to cost efficient paths in its network. Paragraph [0067])**.**

14. **As to Claim 80,** Bowman discloses **the method of claim 75, wherein said transport controlling further comprises:**

responding to said peer-to-peer messages from said gateway (Paragraph [0075] of Bowman discloses the in response to a query if the file has been located the location information is forwarded to the originator of the query message)**.**

15. **As to Claim 87,** Bowman discloses **the method of claim 75 wherein said physical network comprises a third network portion, wherein use of each of said network portions has an associated cost, wherein data transport over said third network portion has a cost less than a cost associated with said second network portion, and wherein said controlling further comprises directing said peer-to-peer messages into said third network portion** (Paragraph [0075] of Bowman discloses if the file has not been located the query message is forwarded to a weighted subset of connected nodes having the lowest cost class in networks 12b to 12n)**.**

16. **As to Claim 92,** Bowman discloses **a computer network message controller that reduces traffic in a decentralized peer-to-peer network, said peer- to-peer network operating over a physical network comprising first and second network portions, said network message controller comprising:**

a router that identifies whether messages in the first network portion are peer-to-peer messages or other messages (Paragraph [0053] of Bowman discloses ensuring that a router, such as distribution router 24 of fig. 3 sends only P2P communications to one or more PPO's 10. As one skilled in the art can appreciate, a number of methods may be used to direct P2P traffic to a PPO 10. As such it is seen that the distribution router is able to identify P2P traffic. Paragraph [0035] explains that network 12a is a network maintained by an ISP and that distribution router 24 is a router of network 12a. Accordingly the router is an ISP router) **and routes all peer-to-peer messages in the first network portion with an intended destination in the second network portion outside of a network of an Internet Service Provider (ISP) to a gateway between peer-to-peer nodes residing on said first and second network portions** (Paragraph [0053] of Bowman discloses ensuring that a router, such as distribution router 24 of fig. 3 sends only P2P communications to one or more PPO's 10. Paragraph [0048] discloses when P2P communication is sent between networks 12a and 12b PPO 10 examines it. Figure 7)**; and**

a gateway controller that controls transport of said peer-to-peer messages into said second network portion (Paragraphs [0036]-[0041] of Bowman disclose PPO 10 serves to provide three main functions. One function is to reduce network traffic by not broadcasting messages but instead sending them where they need to go, or dropping them if there is no need to send them

on. Another is to redirect traffic to a cost efficient path. These are both seen to be methods to control transport of P2P messages)**, [without limiting propagation of the other messages into the second network portion].**

Bowman does not explicitly disclose **without limiting propagation of the other messages into the second network portion**

However, such a feature would have been obvious in view of Bowman. Paragraph [0053] discloses ensuring that a router, such as distribution router 24 of fig. 3 sends only P2P communications to one or more PPO's 10. Thus since only P2P messages are sent to the PPO it is seen that the other traffic is not hindered by the system. Thus although it is not explicitly states that other messages are not limited, since the PPO only acts upon P2P communications it would be obvious that the other messages would not be limited.

17. **As to Claim 93,** Bowman discloses **the computer network message controller of claim 92 wherein said first network portion comprises a portion of said physical network managed by a the ISP and said second network portion comprises a portion of said physical network not managed by the ISP that is connected to said first network portion across a boundary** (Paragraph [0035] of Bowman discloses that network 12a is the network maintained by an ISP and network 12a is connected to a plurality of networks 12b to 12n via links 30b to 30n. Typically networks 12b to 12n would be accessible via the internet. Accordingly 12a is a portion managed by the ISP and 12b to 12n are portions that are not).

18. **As to Claim 94,** Bowman discloses **the computer network message controller of claim 93 wherein said gateway controller limits a number of peer-to-peer connections across said boundary to a permitted maximum** (Paragraph [0078] of Bowman discloses that the system would maintain connections based upon the mount of data, cost class, and the total number of connections that may be maintained. Paragraph [0039] discloses the PPO attempting to connect nodes to other nodes such that connections are not random between nodes).

19. **As to Claim 95,** Bowman discloses **the computer network message controller of claim 92 wherein said gateway controller blocks the peer-to-peer messages at said gateway** (Paragraph [0040] of Bowman discloses dropping messages if there is no need to send them on).

20. **As to Claim 96,** Bowman discloses **the computer network message controller of claim 92 wherein said gateway controller is redirects the peer-to-peer messages to a peer-to-peer node within said first network portion** (Paragraph [0041] of Bowman discloses the PPO redirecting traffic to a cost efficient path. Paragraph [0033] explains that typically the most cost efficient paths for P2P transfer in network 12a will be within network 12a. As such the system is seen to redirect messages to cost efficient paths in its network. Paragraph [0067]).

21. **As to Claim 97,** Bowman discloses **the computer network message controller of claim 92 wherein said gateway controller responds to the peer-to-peer messages** (Paragraph [0075] of Bowman discloses the in response to a query if the file has been located the location information is forwarded to the originator of the query message).

22. **As to Claim 108,** Bowman discloses **the computer network message controller of claim 92 wherein said gateway controller further comprises**
a processor (Paragraphs [0052]-[0053] of Bowman disclose the PPO consisting of many modules and it is seen that such modules would be run by a processor)**, and**
a program memory storing processor control code coupled to said processor to load and implement said code (Paragraphs [0052]-[0053] of Bowman disclose the PPO consisting of many modules and it is seen that such modules would implemented in code)**.**

23. **As to Claim 110,** Bowman discloses **a gateway controller that reduces traffic in a decentralized peer-to-peer network operating over an underlying network comprising first and second network portions, the controller operating at a gateway between peer-to-peer nodes residing on said first and second network portions, the gateway controller comprising:**
an interface for said first and second network portions, that receives all peer-to-peer messages in the first network portion with an intended destination in the second network portion outside of a network of an Internet Service Provider (ISP) (Paragraph [0053] of Bowman discloses ensuring that a router, such as distribution router 24 of fig. 3 sends only P2P communications to one or more PPO's 10. Paragraph [0048] discloses when P2P communication is sent between networks 12a and 12b PPO 10 examines it. Figure 7)**, wherein a router identifies whether messages in the first network portion are peer-to-peer messages or other messages** (Paragraph [0053] of Bowman discloses ensuring that a router, such as

distribution router 24 of fig. 3 sends only P2P communications to one or more PPO's 10. As one skilled in the art can appreciate, a number of methods may be used to direct P2P traffic to a PPO 10. As such it is seen that the distribution router is able to identify P2P traffic. Paragraph [0035] explains that network 12a is a network maintained by an ISP and that distribution router 24 is a router of network 12a. Accordingly the router is an ISP router)**; and**

a controller <u>that limits propagation of the peer-to-peer messages into the second network portion [without limiting propagation of the other messages into the second network portion]</u> (Paragraphs [0036]-[0041] of Bowman disclose PPO 10 serves to provide three main functions. One function is to reduce network traffic by not broadcasting messages but instead sending them where they need to go, or dropping them if there is no need to send them on. Another is to redirect traffic to a cost efficient path. These are both seen to be methods to control transport of P2P messages)**.**

Bowman does not explicitly disclose **<u>without limiting propagation of the other messages into the second network portion</u>**

However, such a feature would have been obvious in view of Bowman. Paragraph [0053] discloses ensuring that a router, such as distribution router 24 of fig. 3 sends only P2P communications to one or more PPO's 10. Thus since only P2P messages are sent to the PPO it is seen that the other traffic is not hindered by the system. Thus although it is not explicitly states that other messages are not limited, since the PPO only acts upon P2P communications it would be obvious that the other messages would not be limited.

24. **As to Claim 111,** Bowman discloses **the gateway controller of claim 110 wherein said controller blocks the peer-to-peer messages at said gateway (**Paragraph [0040] of Bowman discloses dropping messages if there is no need to send them on**).**

25. **As to Claim 112,** Bowman discloses **the gateway controller of claim 110 wherein said controller redirects the peer-to-peer messages to a peer-to-peer node within said first network portion** (Paragraph [0041] of Bowman discloses the PPO redirecting traffic to a cost efficient path. Paragraph [0033] explains that typically the most cost efficient paths for P2P transfer in network 12a will be within network 12a. As such the system is seen to redirect messages to cost efficient paths in its network. Paragraph [0067])**.**

26. **As to Claim 113,** Bowman discloses **the gateway controller of Claim 110 wherein said controller responds to the peer-to-peer messages** (Paragraph [0075] of Bowman discloses the in response to a query if the file has been located the location information is forwarded to the originator of the query message)**.**

27. **As to Claim 123,** Bowman discloses **the gateway controller of claim 110 wherein said first network portion comprises a portion of said underlying network managed by the ISP and said second network portion comprises a portion of said underlying network not managed by the ISP that is connected to said first network portion across a boundary** (Paragraph [0035] of Bowman discloses that network 12a is the network maintained by an ISP and network 12a is connected to a plurality of networks 12b to 12n via links 30b to 30n.

Typically networks 12b to 12n would be accessible via the internet. Accordingly 12a is a portion managed by the ISP and 12b to 12n are portions that are not), **and wherein said controller provides a limited number of peer-to-peer connections across said boundary** (Paragraph [0078] of Bowman discloses that the system would maintain connections based upon the mount of data, cost class, and the total number of connections that may be maintained. Paragraph [0039] discloses the PPO attempting to connect nodes to other nodes such that connections are not random between nodes).

28. **As to Claim 126,** Bowman discloses **the gateway controller of claim 110 wherein said controller further comprises**
a processor (Paragraphs [0052]-[0053] of Bowman disclose the PPO consisting of many modules and it is seen that such modules would be run by a processor) **and**
a program memory storing processor control code coupled to said processor to load and implement said code, said code comprising code to configure said controller to control transport of said message into said other of said network portions (Paragraphs [0052]-[0053] of Bowman disclose the PPO consisting of many modules and it is seen that such modules would implemented in code).

29. Claims 81, 83, 86, 98, 100, 103, 114, 117 and 120 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bowman and further in view of US Pub. No. 2002/0062375 to Teodosiu et al. (hereinafter "Teodosiu").

30. **As to Claim 81,** Bowman discloses **the method of claim 80 wherein said peer-to-peer messages comprise queries** (Paragraph [0074] of Bowman discloses the processing of a query message)**, and wherein said responding further comprises:**

[sending a response to said queries comprising cached data derived from previous responses to the queries]

Bowman does not explicitly disclose **sending a response to said queries comprising cached data derived from previous responses to the queries.**

However, such a feature would have been obvious in view of Teodosiu. Paragraph [0050] of Teodosiu discloses the RNS server creates a record for the resource, including the location of the publisher, and caches the record so that subsequent requests for the resource can be satisfied without communicating again with the publisher. Then paragraph [0044] discloses the gate server may perform similar functions as those performed by an RNS server. Accordingly it would have been obvious to implement the features of the RNS server with the gate server.

It would have been obvious to one of ordinary skill in the art at the time of invention to combine the method of claim 80 as disclosed by Bowman, with caching responses to queries and responding with them as disclosed by Teodosiu. One of ordinary skill in the art would have been motivated to combine to use a known technique to improve similar devices in the same way. Additionally Bowman suggests utilizing a cache server in paragraph [0035]. Bowman discloses a cache server 28 is a repository of information obtained form networks 12b to 12n that may be frequently accessed by nodes 14. To avoid the expense of continually requesting data from networks 12b to 12n network 12a may store frequently accessed information in one or more

caches 28. Most commonly this would be current versions of popular websites, but may include all forms of data.

31. **As to Claim 83,** Bowman discloses **the method of claim 75.** Bowman does not explicitly disclose **wherein said peer-to-peer messages comprises file request messages, and wherein said controlling further comprises:**

modifying a response to a previous file search request such that said response does not indicate that a requested file may be found in said second network portion.

However, such a feature would have been obvious in view of Teodosiu. Paragraph [0039] of Teodosiu discloses the gateway will access the resource on behalf of the client. Accordingly it is seen that the client is prevented from thinking that the requested file is across the gate server border. Thus it would have been obvious for Teodosiu to more explicitly inform the client of this situation.

Examiner recites the same rationale to combine used in claim 81.

32. **As to Claim 86,** Bowman-Teodosiu **the method of claim 83 wherein said underlying network comprises a third network portion, and wherein said modifying further comprises:**

modifying said response to indicate that said requested file is obtainable from a peer-to-peer node located on said third network portion (Paragraph [0075] of Bowman discloses if the file has not been located the query message is forwarded to a weighted subset of connected nodes having the lowest cost class in networks 12b to 12n).

33. **As to Claim 98,** Bowman discloses **the computer network message controller of claim 97 further comprising:**

a cache that stores data (Bowman discloses a cache server 28 is a repository of information obtained form networks 12b to 12n that may be frequently accessed by nodes 14)**, wherein said peer-to-peer messages comprise queries** (Paragraph [0074] of Bowman discloses the processing of a query message)**, and [wherein said gateway controller sends a response to said queries including data from said cache]**

Bowman does not explicitly disclose **wherein said gateway controller sends a response to said queries including data from said cache.**

However, such a feature would have been obvious in view of Teodosiu. Paragraph [0050] of Teodosiu discloses the RNS server creates a record for the resource, including the location of the publisher, and caches the record so that subsequent requests for the resource can be satisfied without communicating again with the publisher. Then paragraph [0044] discloses the gate server may perform similar functions as those performed by an RNS server. Accordingly it would have been obvious to implement the features of the RNS server with the gate server.

Examiner recites the same rationale to combine used in claim 81.

34. **As to Claim 100,** Bowman discloses **the computer network message controller of claim 92.** Bowman does not explicitly disclose **wherein said peer-to-peer messages comprise file request messages, and wherein said gateway controller modifies a response to a**

previous file search request such that said response does not indicate that a requested file may be found in said second network portion.

However, such a feature would have been obvious in view of Teodosiu. Paragraph [0039] of Teodosiu discloses the gateway will access the resource on behalf of the client. Accordingly it is seen that the client is prevented from thinking that the requested file is across the gate server border. Thus it would have been obvious for Teodosiu to more explicitly inform the client of this situation.

Examiner recites the same rationale to combine used in claim 81.

35. **As to Claim 103,** Bowman discloses **the computer network message controller of claim 92 wherein said underlying network further comprises a third network portion, [wherein said gateway controller modifies said response to] indicate that said requested file is obtainable from a peer-to-peer node located on said third network portion** (Paragraph [0075] of Bowman discloses if the file has not been located the query message is forwarded to a weighted subset of connected nodes having the lowest cost class in networks 12b to 12n)**.**

Bowman does not explicitly disclose **wherein said gateway controller modifies said response**

However, such a feature would have been obvious in view of Teodosiu. Paragraph [0039] of Teodosiu discloses the gateway will access the resource on behalf of the client. Accordingly it is seen that the client is prevented from thinking that the requested file is across the gate server border. Thus it would have been obvious for Teodosiu to more explicitly inform the client of this situation.

Examiner recites the same rationale to combine used in claim 81.

36. **As to Claim 114,** Bowman discloses **the gateway controller of claim 113 further comprising:**

a query cache that stores data (Bowman discloses a cache server 28 is a repository of information obtained form networks 12b to 12n that may be frequently accessed by nodes 14) **[derived from responses to queries, wherein said controller responds the queries using data from said query cache], wherein the peer-to-peer messages comprise queries** (Paragraph [0074] of Bowman discloses the processing of a query message)**.**

Bowman does not explicitly disclose **derived from responses to queries, wherein said controller responds the queries using data from said query cache**

However, such a feature would have been obvious in view of Teodosiu. Paragraph [0050] of Teodosiu discloses the RNS server creates a record for the resource, including the location of the publisher, and caches the record so that subsequent requests for the resource can be satisfied without communicating again with the publisher. Then paragraph [0044] discloses the gate server may perform similar functions as those performed by an RNS server. Accordingly it would have been obvious to implement the features of the RNS server with the gate server.

Examiner recites the same rationale to combine used in claim 81.

37. **As to Claim 117,** Bowman discloses **the gateway controller of claim 110 wherein said peer-to-peer messages comprise file request messages, and said controller modifies a**

response to a previous file search request such that said response does not indicate that a requested file may be found in said second network portion.

However, such a feature would have been obvious in view of Teodosiu. Paragraph [0039] of Teodosiu discloses the gateway will access the resource on behalf of the client. Accordingly it is seen that the client is prevented from thinking that the requested file is across the gate server border. Thus it would have been obvious for Teodosiu to more explicitly inform the client of this situation.

Examiner recites the same rationale to combine used in claim 81.

38. **As to Claim 120,** Bowman discloses **the gateway controller of claim 110 wherein said underlying network further comprises**

a third network portion, [wherein said controller modifies said response] to indicate said requested file is obtainable from a peer-to- peer node located on said third network portion (Paragraph [0075] of Bowman discloses if the file has not been located the query message is forwarded to a weighted subset of connected nodes having the lowest cost class in networks 12b to 12n)**.**

Bowman does not explicitly disclose **wherein said gateway controller modifies said response**

However, such a feature would have been obvious in view of Teodosiu. Paragraph [0039] of Teodosiu discloses the gateway will access the resource on behalf of the client. Accordingly it is seen that the client is prevented from thinking that the requested file is across the gate server border. Thus it would have been obvious for Teodosiu to more explicitly inform the client of this situation.

Examiner recites the same rationale to combine used in claim 81.

39. Claim 82, 99 and 115 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bowman and further in view of US Pub. No. 2004/0148434 to Matsubara et al. (hereinafter "Matsubara").

40. **As to Claim 82,** Bowman discloses **the method of claim 80.** Bowman does not explicitly disclose **wherein said peer-to-peer messages comprise file requests, and wherein said responding further comprises**
sending a response to said file requests comprising previously cached data for a requested file.

However, Matsubara discloses this. Paragraph [0062] of Matsubara discloses a data stored configured with the P2P gateway server to cache accessed files. Doing so facilitates subsequent access to the requested file by other peer users.

It would have been obvious to one of ordinary skill in the art at the time of invention to combine the method of claim 80 as disclosed by Bowman, with caching files as disclosed by Matsubara. One of ordinary skill in the art would have been motivated to combine to provide improved file access performance (paragraph [0062] of Matsubara). Additionally Bowman suggests utilizing a cache server in paragraph [0035]. Bowman discloses a cache server 28 is a repository of information obtained form networks 12b to 12n that may be frequently accessed by nodes 14. To avoid the expense of continually requesting data from networks 12b to 12n

network 12a may store frequently accessed information in one or more caches 28. Most commonly this would be current versions of popular websites, but may include all forms of data.

41. **As to Claim 99,** Bowman discloses **the computer network message controller of claim 97.** Bowman does not explicitly disclose **wherein said peer-to-peer messages comprise file requests, further comprising:**

a cache that stores data derived from previous responses to file requests, and wherein said gateway controller sends a response to' said file request including data from said cache.

However, Matsubara discloses this. Paragraph [0062] of Matsubara discloses a data stored configured with the P2P gateway server to cache accessed files. Doing so facilitates subsequent access to the requested file by other peer users.

Examiner recites the same rationale to combine used in claim 82.

42. **As to Claim 115,** Bowman discloses **the gateway controller of claim 113.** Bowman does not explicitly disclose **further comprising**

a file request cache that stores data derived from responses to file requests, wherein the peer-to-peer messages comprise file requests and said controller responds to said file requests using data from said file request cache.

However, Matsubara discloses this. Paragraph [0062] of Matsubara discloses a data stored configured with the P2P gateway server to cache accessed files. Doing so facilitates subsequent access to the requested file by other peer users.

Examiner recites the same rationale to combine used in claim 82.

43. Claims 84, 101 and 118 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bowman-Teodosiu and further in view of US Pub. No. 2002/0049760 to Scott et al. (hereinafter "Scott").

44. **As to Claim 84,** Bowman-Teodosiu **the method of claim 83.** Bowman-Teodosiu does not explicitly disclose **wherein said requested file is identified by a hash value.**

However, Scott discloses this. Paragraph [0008] of Scott discloses files in the peer-to-peer network may be identified or accessed based upon their associated hash ID values.

It would have been obvious to one of ordinary skill in the art at the time of invention to combine the method of claim 83 as disclosed by Bowman-Teodosiu, with using hash values as disclosed by Scott. One of ordinary skill in the art would have been motivated to combine to use a known technique to improve similar devices in the same way. Paragraph [0055] of Bowman discloses utilizing a string edit distance module 128 to determine the similarity between the name of a requested file and the filenames known to PPO 10. Accordingly it would be obvious to use any method known to identify files such as hash values.

45. **As to Claim 101,** Bowman-Teodosiu **the computer network message controller of claim 100.** Bowman-Teodosiu does not explicitly disclose **wherein said requested file is identified by a hash value.**

However, Scott discloses this. Paragraph [0008] of Scott discloses files in the peer-to-peer network may be identified or accessed based upon their associated hash ID values.

Examiner recites the same rationale to combine used in claim 84.

46. **As to Claim 118,** Bowman-Teodosiu **the gateway controller of claim 117.** Bowman-Teodosiu does not explicitly disclose **wherein said requested file is identified by a hash value.**

However, Scott discloses this. Paragraph [0008] of Scott discloses files in the peer-to-peer network may be identified or accessed based upon their associated hash ID values.

Examiner recites the same rationale to combine used in claim 84.

47. Claims 85, 102 and 119 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bowman-Teodosiu and further in view of Matsubara.

48. **As to Claim 85,** Bowman-Teodosiu discloses **the method of claim 83.** Bowman-Teodosiu does not explicitly disclose **further comprising:**

storing requested files in a cache, wherein said response is modified to refer to said cache.

However, Matsubara discloses this. Paragraph [0062] of Matsubara discloses a data stored configured with the P2P gateway server to cache accessed files. Doing so facilitates subsequent access to the requested file by other peer users.

Examiner recites the same rationale to combine used in claim 82.

49. **As to Claim 102,** Bowman-Teodosiu discloses **the computer network message controller of claim 100.** Bowman-Teodosiu does not explicitly disclose **further comprising:**

a cache that stores requested files, and wherein said gateway controller modifies said response to refer to said cache.

However, Matsubara discloses this. Paragraph [0062] of Matsubara discloses a data stored configured with the P2P gateway server to cache accessed files. Doing so facilitates subsequent access to the requested file by other peer users.

Examiner recites the same rationale to combine used in claim 82.

50. **As to Claim 119,** Bowman-Teodosiu discloses **the gateway controller of claim 117 further comprising a cache that stores requested flies, wherein said controller modifies said response to refer to said cache.**

However, Matsubara discloses this. Paragraph [0062] of Matsubara discloses a data stored configured with the P2P gateway server to cache accessed files. Doing so facilitates subsequent access to the requested file by other peer users.

Examiner recites the same rationale to combine used in claim 82.

51. Claims 88, 89, 104, 105, 121 and 122 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bowman and further in view of US Pub. No. 2004/0088646 to Yeager et al. (hereinafter "Yeager").

52. **As to Claim 88,** Bowman discloses **the method of claim 75.** Bowman does not explicitly disclose **wherein said peer-to-peer messages have message identifiers, and wherein said controlling further comprises:**

storing said message identifiers for said peer-to-peer messages;

monitoring message identifiers of the peer-to-peer messages passing through said gateway to produce identified messages and

limiting propagation of said identified messages such that said messages pass between said first and second network portions no more than a permitted maximum number of times.

However, Yeager discloses this. Paragraphs [0764]-[0767] of Yeager disclose controlling the propagation of messages and will propagate a message unless it is found that the message is a duplicate. Each message is associated with a unique identifier. When a propagated message has been duplicated and has already been received on a peer the duplicate is discarded. Since the message duplicate would be discarded it is seen that it would have only been allowed to go through once before duplicates began to get discarded.

It would have been obvious to one of ordinary skill in the art at the time of invention to combine the method of claim 75 as disclosed by Bowman, with limiting message propagation as disclosed by Yeager. One of ordinary skill in the art would have been motivated to combine to use a known technique to improve similar devices in the same way. Yeager and Bowman are directed toward peer-to-peer systems and as such it would be obvious to utilize features disclosed to be known in one peer-to-peer system in another peer-to-peer system.

53. **As to Claim 89,** Bowman-Yeager discloses **the method of claim 88 wherein said permitted maximum number of times is one** (Paragraphs [0764]-[0767] of Yeager disclose controlling the propagation of messages and will propagate a message unless it is found that the message is a duplicate. Each message is associated with a unique identifier. When a propagated

message has been duplicated and has already been received on a peer the duplicate is discarded. Since the message duplicate would be discarded it is seen that it would have only been allowed to go through once before duplicates began to get discarded).

Examiner recites the same rationale to combine used in claim 88.

54. **As to Claim 104,** Bowman discloses **the computer network message controller of claim 92.** Bowman does not explicitly disclose **wherein said peer-to-peer messages have message identifiers, and wherein said gateway controller stores said message identifiers for said peer-to-peer messages, monitors message identifiers of the peer-to-peer messages passing through said gateway to produce identified messages, and limits propagation of said identified messages such that said identified messages pass between said first and second network portions no more than a permitted maximum number of times.**

However, Yeager discloses this. Paragraphs [0764]-[0767] of Yeager disclose controlling the propagation of messages and will propagate a message unless it is found that the message is a duplicate. Each message is associated with a unique identifier. When a propagated message has been duplicated and has already been received on a peer the duplicate is discarded. Since the message duplicate would be discarded it is seen that it would have only been allowed to go through once before duplicates began to get discarded.

Examiner recites the same rationale to combine used in claim 88.

55. **As to Claim 105,** Bowman-Yeager discloses **the computer network message controller of claim 104 wherein said permitted maximum number of times is one** (Paragraphs [0764]-

[0767] of Yeager disclose controlling the propagation of messages and will propagate a message unless it is found that the message is a duplicate. Each message is associated with a unique identifier. When a propagated message has been duplicated and has already been received on a peer the duplicate is discarded. Since the message duplicate would be discarded it is seen that it would have only been allowed to go through once before duplicates began to get discarded).

Examiner recites the same rationale to combine used in claim 88.

56. **As to Claim 121,** Bowman discloses **the gateway controller of claim 110.** Bowman does not explicitly disclose **wherein the peer-to-peer messages have message identifiers, said controller stores said message identifiers for the peer-to-peer messages, monitors the message identifiers of the peer-to-peer messages passing through said gateway to produce identified messages, and limits propagation of said identified messages such that said peer-to-peer messages pass between said first and second network portions no more than a permitted maximum number of times.**

However, Yeager discloses this. Paragraphs [0764]-[0767] of Yeager disclose controlling the propagation of messages and will propagate a message unless it is found that the message is a duplicate. Each message is associated with a unique identifier. When a propagated message has been duplicated and has already been received on a peer the duplicate is discarded. Since the message duplicate would be discarded it is seen that it would have only been allowed to go through once before duplicates began to get discarded.

Examiner recites the same rationale to combine used in claim 88.

57. **As to Claim 122,** Bowman-Yeager discloses **the gateway controller of claim 121~ wherein said permitted maximum number of times is one (**Paragraphs [0764]-[0767] of Yeager disclose controlling the propagation of messages and will propagate a message unless it is found that the message is a duplicate. Each message is associated with a unique identifier. When a propagated message has been duplicated and has already been received on a peer the duplicate is discarded. Since the message duplicate would be discarded it is seen that it would have only been allowed to go through once before duplicates began to get discarded)**.**

Examiner recites the same rationale to combine used in claim 88.

Conclusion

58. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KEVIN S. MAI whose telephone number is (571)270-5001. The examiner can normally be reached on Monday through Friday 7:30 - 5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia can be reached on (571)272-3880. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Rupal D. Dharia/
Supervisory Patent Examiner, Art Unit 2400

/K. S. M./
Examiner, Art Unit 2456